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Cardiac Cavernous Hemangioma at the Right Atrium- A Rare Case Report with Review of Literature

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Abstract- Cardiac hemangiomas are extremely rare forms of tumor and account for only 2.8–5% of all benign cardiac tumors [1,2]. It is a rare benign primary cardiac tumor, with less than 100 cases described in current cardiac literature.[3] We present a 30-year-old woman presented with feature of palpitation, dyspnoea on exertion and occasional chest pain for last 3 years.

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Abstract- **Cardiac hemangiomas are extremely rare forms of tumor and account for only 2.8–5% of all benign cardiac tumors [1,2]. It is a rare benign primary cardiac tumor, with less than 100 cases described in current cardiac literature.[3] We present a 30-year-old woman presented with feature of palpitation, dyspnoea on exertion and occasional chest pain for last 3 years.**

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I. Introduction

Hemangioma of the heart, presenting as a primary cardiac tumor is extremely rare with less than 100 cases described in current cardiac literature.[3] The origin of hemangiomas is uncertain; they are thought to be either true neoplasm or hamartomas. They are common benign congenital vascular lesions most often occurring in the skin. However in rare instances it can be occasionally found in internal organs. Here we present a case of cavernous hemangioma involving right atrium.

II. Case Report

A 30 year old female presented with palpitation, dyspnoea on exertion and occasional chest pain for last 3 years. Examination of the precordium revealed loud S 1, normal split of S2 There was a mid-diastolic murmur, best heard on L 3rd inter- costal space parasternally. ECG showed Sinus rhythm with Left axis deviation, ECHOCARDIOGRAPHY showed Situs solitus, AV & VA concordance, a large mass in right atrium diagnosed as having myxoma. Other routine investigations did not reveal any abnormality. The patient was taken to the operating room for elective excision of the cardiac mass, which was believed to be an atrial myxoma. The mass was successfully excised along with a small portion of inter -atrial septum. This resulted in an atrial septal defect which was closed primarily. The patient had an uneventful postoperative period and was safely discharged on 7th post operative day. Grossly the mass was about 2cms in maximum dimension, with dilated and tortuous vessels over it. The specimen was attached with the septum with a narrow stalk and was send for histopathological examination. Microscopical Examination shows presence of cavernous spaces containing blood elements lined by flattened endothelium. Occasional medium sized feeder vessels are also noted.

III. Discussion

Cardiac hemangiomas are benign vascular tumors consisting of blood vessels and are identical to hemangiomas located elsewhere in the body. Histologic patterns that have been described include capillary hemangiomas, cavernous hemangiomas, hemangioendotheliomas, and intramuscular hemangiomas.[4] Among them, cavernous and capillary types are encountered more frequently. The epicardium is the most common location for cardiac hemangiomas, but they may also be found in myocardium and endocardium. A cavernous hemangioma is a spongy mass of wide blood-filled spaces which are pleomorphic in shape and dimension[5]. Hemangiomas can present in any age group with a mild predominance in females. The symptomatology depends on the anatomic location and extension of the tumor. Preoperative diagnosis of a cardiac hemangioma, occurs in a minority of cases. The diagnosis of cardiac tumors is aided by imaging techniques however periodic examinations and echocardiography are recommended [6]. Echocardiography is a sensitive and noninvasive modality for detecting hemangiomas [6,7]. Surgical excision is the mainstay of treatment because of the benign nature of the tumor. The long-term prognosis is favourable after adequate surgical resection. The Authors Declare there is No Conflicts of Interest

IV. Conclusion

However, rare this tumor may cause sudden death, and there is remote chance of transformation to angiosarcoma according to one case report [9]. As a result, the mainstay of treatment of these tumors is surgical resection. Postoperative follow-up is mandatory for recurrence monitoring [8].

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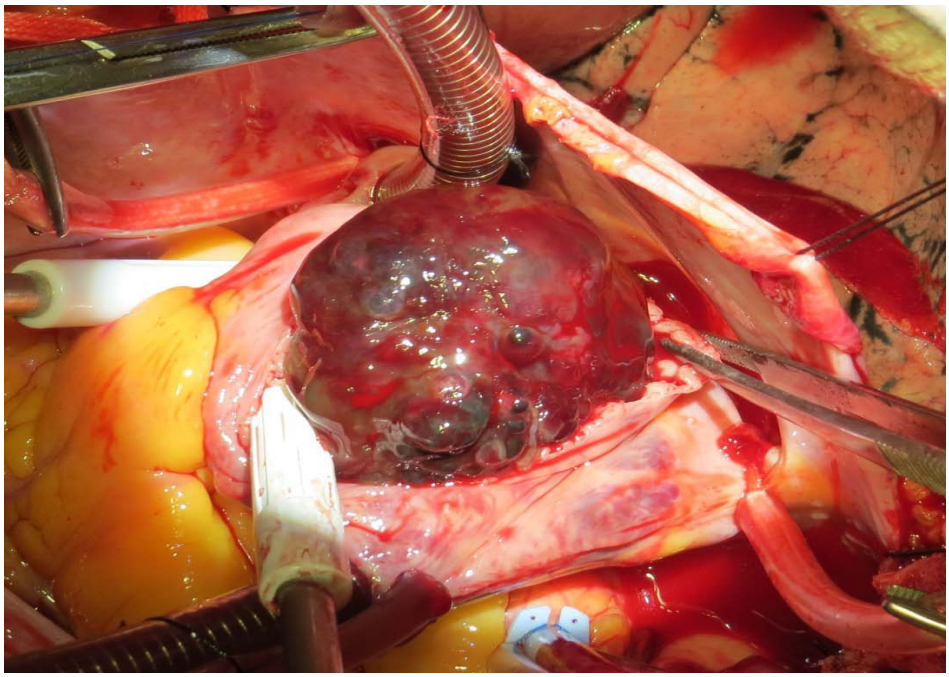

Figure 1 : Intraoperative photograph showing haemorrhagic mass located in the right atrium.

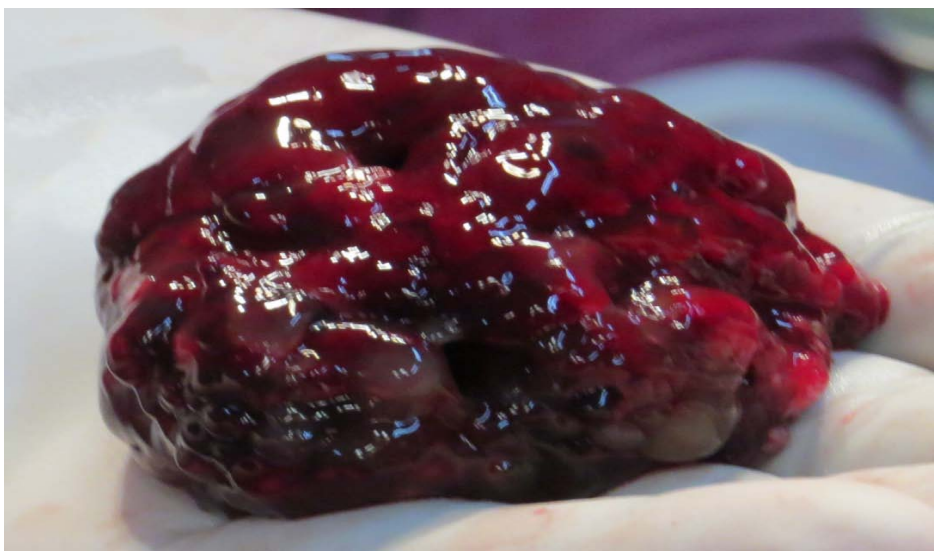

Figure 2 : A mass of about 2 cm in diameter, with dilated and tortuous vessels over it.

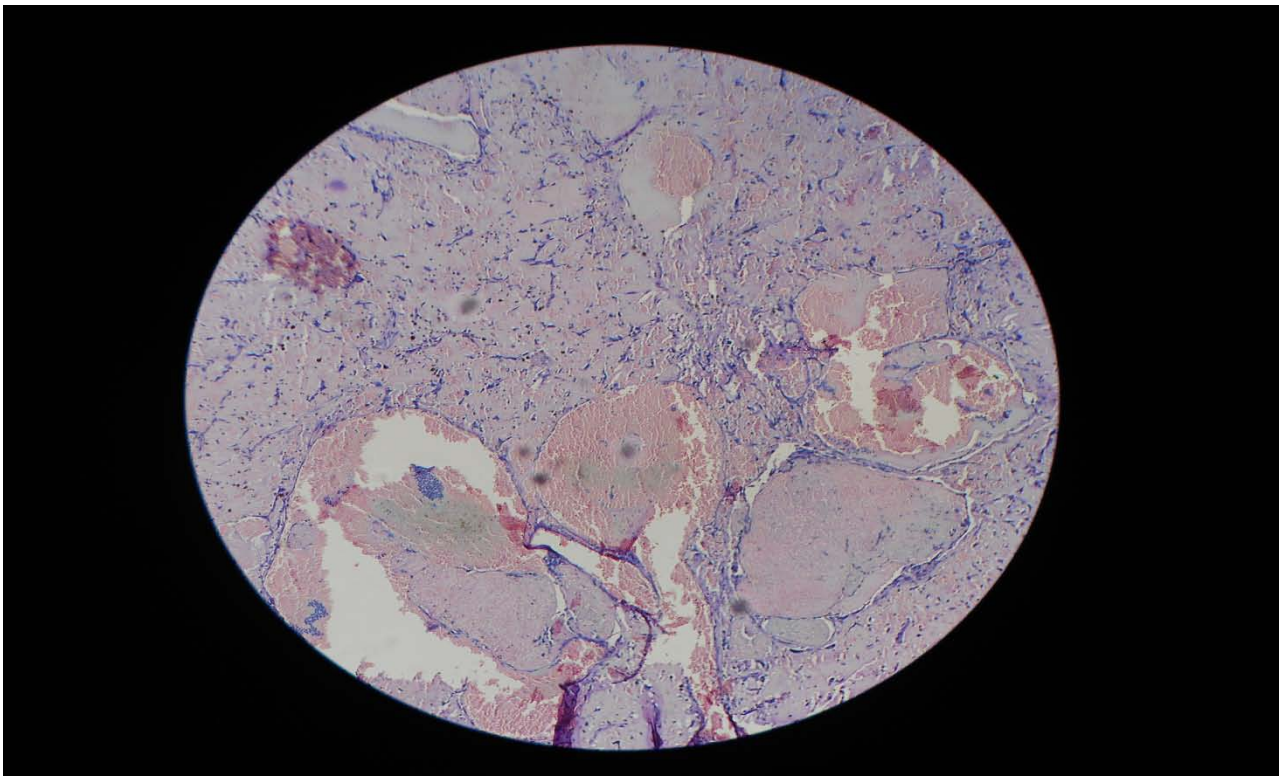

Figure 3 : Presence of cavernous spaces containing blood elements lined by flattened endothelium.(10X)

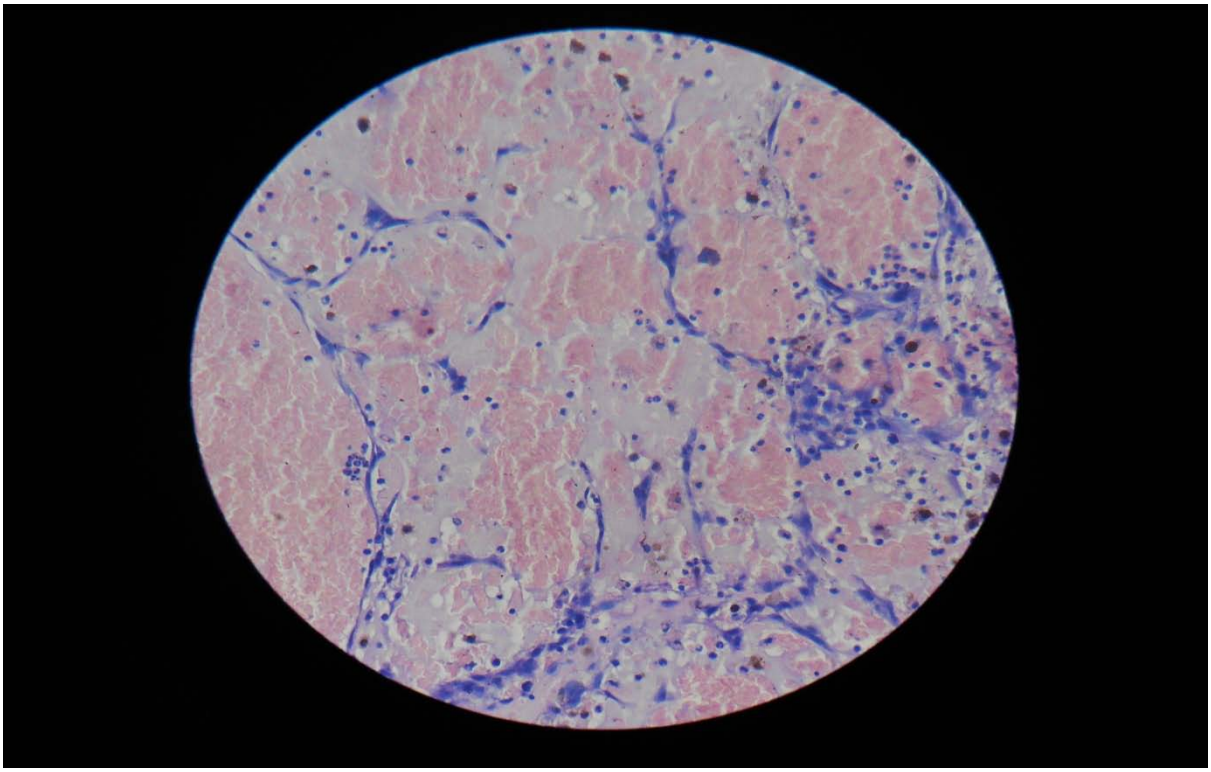

Figure 4 : (40X)